

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

RONALD SCHOBER,

Case No. 08-CV-5993 (PJS/SRN)

Plaintiff,

v.

ORDER

THE COLEMAN COMPANY, INC.,

Defendant.

Mark N. Stageberg, for plaintiff.

Geron J. Bird, Kenneth R. Lang, and Matthew K. Holcomb, HINKLE ELKOURI LAW FIRM L.L.C.; George W. Soule and William N.G. Barron, IV, BOWMAN & BROOKE LLP, for defendant.

Plaintiff Ronald Schober brings this product-liability action against defendant The Coleman Company, Inc. ("Coleman") to recover for injuries that Schober sustained when a Coleman heater allegedly caused an explosion. This matter is before the Court on Coleman's motion to exclude the testimony of plaintiff's expert Robert Engberg. For the reasons given below, Coleman's motion is denied in all respects but one: Engberg will not be permitted to testify that the heater was defective because the heater's two burners had not been incorporated into a single burner head.

I. BACKGROUND

On February 4, 2006, Schober was operating a Coleman Focus 30 heater to thaw frozen dirt for use in landscaping. The heater and dirt were inside a 5-foot by 10-foot trailer. After the heater had been operating for about an hour and a half, Schober opened the rear door of the trailer to check on the heater. Schober recalls that, after opening the door, a blue fireball came toward him. He tried to cover his face with his hands as he fell to the ground. Schober suffered

burns to his face, neck, and hands, and he allegedly suffered permanent respiratory damage. Schober Aff. ¶¶ 6-7, Jan. 22, 2010 [hereinafter “Schober Aff.”]; Stageberg Aff. Ex. 7 at 2-3 [Docket No. 56-7] [hereinafter “Engberg R. at ____”].

The Coleman Focus 30 is a propane-fueled, dual-burner portable heater. Each burner may be individually fired. Engberg R. at 2. Each burner head (consisting of a burner surrounded by a reflector shield) is fueled by a burner tube that connects to a propane tank. The burner tube is inserted into a port in the back of the burner head to a depth of about a quarter of an inch. Engberg R. at 4. Each burner head is mounted to a steel angle bracket. Engberg R. at 5. After the explosion, it was determined that one of the burner tubes had become disconnected from its burner head. *See* Stageberg Aff. Ex. 6 [Docket No. 56-6] (photograph of heater showing disconnected burner tube). No one knows how or when the burner tube became disconnected.

Engberg is a mechanical engineer with expertise in the design and construction of natural-gas and propane facilities. Engberg Aff. ¶ 2 & Ex. 1. In his expert report, Engberg opines that the explosion was caused when propane leaked from the disconnected burner tube and then combined with intruding air to form a combustible mixture. Engberg R. at 4. Engberg further opines that the heater was defectively designed because it did not incorporate any safeguards to prevent the burner tube from becoming disconnected from the burner head. Engberg R. at 7.

Engberg’s theory is that, at some point, some amount of force was applied to the burner head, causing the steel angle bracket to bend and the burner head to become so misaligned that the burner tube pulled out of the port at the back. Engberg calculates that applying 7 to 10 pounds of force at a right angle to the top of the burner head would permanently deflect the head

in this manner. Engberg R. at 5. Engberg further opines that this amount of force is well within the range of force to which the burner head would be subject during ordinary handling. For example, setting a 12-pack of soda on the burner head (as one might do when, say, packing for a camping trip) would subject it to 7 to 10 pounds of force. Engberg Dep. 106. Alternatively, grabbing the burner head to adjust the direction of the heat would subject it to at least 40 pounds of force. Stageberg Aff. Ex. 8 at 5 [Docket No. 56-8] [hereinafter “Rebuttal at ___”].

Engberg contends that the heater should have incorporated at least one of the following safeguards to prevent the burner tube from becoming disconnected from the burner head: (1) an anchoring element, such as a set screw or locking pin, to hold the burner tube in place; (2) a stronger bracket on which to mount the burner head, to better prevent misalignment of the head and the resulting pull-out of the burner tube; or (3) deeper insertion of the burner tube into the back of the burner head. Engberg R. at 6-7; Engberg Aff. ¶ 8.

II. ANALYSIS

Coleman moves to exclude Engberg’s testimony under Fed. R. Evid. 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Rule 702, which governs the admissibility of expert testimony, provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

District courts have wide latitude in deciding whether an expert’s testimony is reliable. *Olson v. Ford Motor Co.*, 481 F.3d 619, 626 (8th Cir. 2007).

In determining whether an expert's testimony is the product of "reliable principles and methods," district courts consider such factors as:

- (1) whether the theory or technique can be (and has been) tested;
- (2) whether the theory or technique has been subjected to peer review and publication;
- (3) whether the theory or technique has a known or potential error rate and standards controlling the technique's operation; and
- (4) whether the theory or technique is generally accepted in the scientific community.

Smith v. Cangieter, 462 F.3d 920, 923 (8th Cir. 2006). Because this inquiry is necessarily fact-specific, there is no single requirement for reliability. See *Unrein v. Timesavers, Inc.*, 394 F.3d 1008, 1011 (8th Cir. 2005). Instead, these factors are flexible and should be adapted or rejected as the case demands. *Id.* The burden of establishing that the proposed testimony meets the standards of Rule 702 is on the proponent of the expert opinion. *Wagner v. Hesston Corp.*, 450 F.3d 756, 758 (8th Cir. 2006).

Coleman does not challenge Engberg's qualifications as an expert. Instead, Coleman contends that Engberg's opinions are not based on a reliable methodology and are not sufficiently grounded in the facts of this case.

Coleman first argues that Engberg's fire-causation theory — that is, his theory that escaping propane mixed with air to form a combustible fireball — is not based on sufficient data. Specifically, Coleman complains that Engberg did not determine exactly how much propane would need to be released in order for his theory to be viable, did not measure the rate at which propane escaped from the separated burner tube, did not calculate the total volume of propane that had escaped before Schober opened the door to the trailer, and failed to consider how the

ventilation in the trailer could have affected his theory. In his rebuttal report, however, Engberg opined that the leaking propane would have tended to settle at the bottom of the trailer and that only a small amount of gas-air mixture would need to accumulate near the burner (which was on the floor of the trailer) to generate a dangerous flash fire. Rebuttal at 3; *see also* Engberg Dep. 82 (testifying that the propane “would in a very general way settle immediately to the floor elevation”). Engberg also confirmed that the heater did in fact leak propane while in operation. Engberg Dep. 51.

Like most expert opinions, Engberg’s opinion has weaknesses that may be exploited on cross-examination and that may cause the jury to give the opinion little or no weight. But the Court does not believe that the weaknesses cited by Coleman so undermine the proposed testimony as to make it inadmissible under Rule 702.¹ As both the Supreme Court and the Eighth Circuit have made clear:

Rule 702 does not permit a judge to weigh conflicting expert testimony, admit the testimony that he or she personally believes, and exclude the testimony that he or she does not personally believe. Nor does Rule 702 permit a judge to exclude expert testimony just because it seems doubtful or tenuous. The Supreme Court has been clear about how infirmities in expert testimony should be exposed: “Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.”

¹Coleman also contends that Engberg’s fire-causation theory should be excluded because Engberg testified at his deposition that he would not be offering a “cause and origin” opinion about the fire. *See* Engberg Dep. 11. It appears that Engberg’s testimony was the result of some misunderstanding about the scope of the question and in particular the precise meaning of “cause and origin,” which is a term of art in fire investigation. There is no question that Coleman received proper notice of Engberg’s opinion about what caused the fire; Engberg clearly describes, in his initial report, exactly how he believes the explosion was caused. The Court therefore rejects Coleman’s argument that Engberg’s fire-causation theory should be excluded as a discovery sanction.

Olson, 481 F.3d at 626 (quoting *Daubert*, 509 U.S. at 596).

Coleman next attacks Engberg's theory that the heater was defectively designed. To prevail on his defective-design claim, Schober must prove that the heater was in a defective condition and unreasonably dangerous when put to a reasonably foreseeable use. *See Bilotta v. Kelley Co.*, 346 N.W.2d 616, 621, 623 n.3 (Minn. 1984); *Trost v. Trek Bicycle Corp.*, 162 F.3d 1004, 1009 (8th Cir. 1998). Determining whether a product is unreasonably dangerous requires a balancing of the seriousness of the potential harm, the likelihood that the harm will occur, and the burden of incorporating safeguards that would prevent the harm. *Trost*, 162 F.3d at 1009. "The test is an objective standard 'which focuses on the conduct of the manufacturer in evaluating whether its choice of design struck an acceptable balance among several competing factors.'" *Id.* (quoting *Bilotta*, 346 N.W.2d at 622).

As noted, Engberg calculated that a mere 7 to 10 pounds of force applied at a right angle to the burner head would be sufficient to permanently dislocate the head and begin a pull-out of the burner tube from the back of the head. Engberg also opined that ordinary handling — such as setting a pack of soda on the burner head or grabbing the burner head to adjust the direction of the heat — would subject the heater to enough force to permanently dislocate the burner head and begin the pull-out process. Finally, Engberg offered what appear to be simple and inexpensive design changes that, in his opinion, would reduce or eliminate the possibility of a burner tube pulling out of a burner head.

During his deposition, Engberg sketched a design of the heater with a set screw to demonstrate the feasibility of his proposed alternative design. Engberg Dep. 122-23; Engberg Aff. ¶ 10 & Ex. 10. Engberg also explained why the use of a set screw would not interfere with

the functionality of the heater. Engberg Dep. 126-27; Rebuttal at 4. True, Engberg's opinion that the Coleman heater was defectively designed was not subject to extensive testing, but not every expert opinion has to be tested to be admissible. Again, like every expert witness, Engberg may have some difficult questions to answer at trial, but he has considered the basic factors relevant to determining whether a product design is defective, and his opinion is reliable enough to be admitted under Rule 702.

Coleman points out that, as Engberg conceded, his calculation about the amount of force necessary to begin a pull-out of the burner tube "doesn't necessarily give us conclusive information on at what point the burner tube, given its depth of placement into the back of the burner, would pop out[.]" Engberg Dep. 118. But Rule 702 does not require expert testimony to be "conclusive," and, in any event, Engberg opined in his report that "this relative movement of the tube out of [its] holding coupling" — that is, the movement resulting from the application of about 10 pounds of force — "will allow a serious gas leak behind the burner assembly." Engberg R. at 5. Coleman also points out that Engberg based his initial calculations on an erroneous assumption about the type of metal used for the bracket. But Engberg testified that the error would not make a significant difference in his calculations. Engberg Dep. 110-12.

Finally, Coleman contends that Engberg's failure to test his theories renders them inadmissible. Again, though, neither Rule 702 nor any judicial opinion of which the Court is aware requires that every expert opinion must be backed by testing. Depending on the opinion, testing may or may not be an important consideration in determining whether the opinion is reliable. Indeed, depending on the opinion, testing may or may not be *possible*. Testing is certainly not an absolute requirement. *Cf. Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 150

(1999) (emphasizing that the *Daubert* factors are not a definitive checklist and that the admissibility inquiry is a flexible one that depends on the type of case and expertise at issue).

Here, Engberg's opinions are grounded on basic and uncontroversial engineering principles and calculations. One need not do a lot of testing to prove that a burner tube attached to a burner head by a screw will come loose less frequently than a burner tube that is not so attached — or that a burner head that is inserted a half inch into a burner head will come loose less frequently than a burner head that is inserted a quarter inch. If Coleman wants to ask the jury to disregard these opinion because they have not been tested, it is welcome to do so. But the opinions are admissible.

For these reasons, the Court denies Coleman's motion to exclude Engberg's testimony. The Court makes one exception: In his affidavit, Engberg opines for the first time that the two-headed design of the heater is defective and contends that Coleman should have incorporated both burners into a single head, as some of Coleman's competitors have done. Engberg Aff. ¶ 9. At oral argument, Schober conceded that this opinion was not timely disclosed and should be excluded under Fed. R. Civ. P. 37. The Court agrees.²

ORDER

Based on the foregoing, and on all of the files, records, and proceedings herein, IT IS HEREBY ORDERED THAT:

1. Defendant's motion to exclude the testimony of Robert Engberg [Docket No. 48] is GRANTED IN PART and DENIED IN PART.

²Schober nevertheless contends that he can cross-examine defense witnesses about this alternative single-head design. Schober may be correct, but that will depend on exactly what the defense witnesses say at trial. The Court will therefore defer a ruling on that issue until trial.

2. The motion is GRANTED with respect to Engberg's opinion that the Coleman Focus 30 heater is defectively designed because the two burners are not incorporated into a single burner head.
3. The motion is DENIED in all other respects.

Dated: March 29, 2010

s/Patrick J. Schiltz

Patrick J. Schiltz

United States District Judge